*Editor's note: This paper won the **1st prize Student Paper Award – PhD level** at the **happy projects '12** conference in Vienna in May 2012; it is republished here with approval of the author and happy projects conference organizers, PROJEKTMANAGEMENT GROUP at the Vienna University of Economics and Business Administration and ROLAND GAREIS CONSULTING. Learn about the happy projects events at http://www.happyprojects.at/*

Emerging Sustainable Development Strategy in Projects: A Theoretical Framework

By **Lynn A. Keeys,** MA, PMP
Strategy, Program & Project Management
SKEMA Business School, Lille, France

Abstract

This article proposes a theoretical framework for emerging sustainable development strategy in projects, within the context of corporate sustainability strategy. The framework is the first phase of exploratory case study research on integrating sustainable development principles in projects, as a core business operation. The framework is based on a literature review of concepts, definitions, theories and models in strategic management, corporate sustainability, and projects. The theoretical framework is intended to help develop new knowledge and insight into how business can integrate SD principles into core business operations from a management process, rather than sustainability content perspective.

Further results of the PhD research will be published in: Keeys, L, Huemann, M., & Turner, R (forthcoming 2013), Integrating project strategy for sustainable development: A conceptual framework. In A.J.G. Silvius, AJG & J. Tharp (eds), *Sustainable Integration for Effective Project Management*, Hershey, PA: IGI Global House.

1. Introduction

The burning challenge of business in the 21st century is to mainstream sustainable development (SD) principles into the daily practice of business (Accenture 2010). The 1987 World Commission Report on Environment and Development, "Our Common Future," better known as the "Brundtland Report" (WCED 1987) defined sustainable development as "the process of development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p.1).

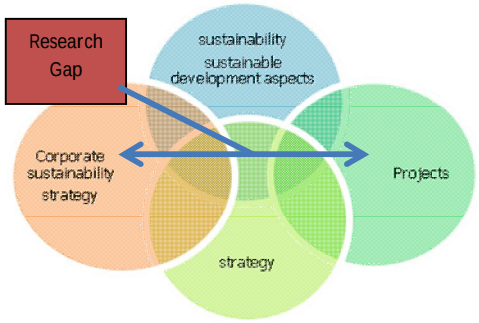
As core business activities, projects have not escaped this challenge and are called to integrate holistic SD principles, addressing economic, environmental and social (triple bottom line) concerns of stakeholders at the local level while contributing to sustainability

at the global level in the short, medium and long term. Businesses develop corporate sustainability (CS) strategies to outline their path towards sustainability. However, it is not clear whether or how these strategies actually address holistic sustainability issues in core business activities such as projects (Ebner & Baumgartner 2010).

2. Research Question, Methodology and Structure of Paper

SD principles are not largely considered in projects or project management processes (Labuschagne et al. 2005; Gareis et al, 2010), although companies say they consider sustainability. Researchers have offered approaches for integrating SD principles in projects and in project management standards (Labuschagne et al. 2004; Gareis et al. 2010). Gareis et al. (2010) propose integrating SD at the project assignment stage of the project management process (where the investment idea is assessed, decisions made and project initiated), providing the basis for sustainable project results and investments.

Project research largely focuses on specific sustainability aspects, i.e., environmental or social, on selected industries--manufacturing (Labuschagne et al. 2005) and construction (Edum-Fotoe et al. 2008; Khalfan 2006) or on techniques, i.e., project life cycle management (Labuschagne & Brent, 2004) and value engineering (Al-Saleh & Taleb 2010). Presley et al. (2007) propose an "activity-based" decision-making framework as a strategic justification tool for evaluating a project's contribution to corporate sustainability. Project management research acknowledges that corporate support for sustainability influences how sustainability principles are addressed within projects (Gareis, Huemann, & Martinuzzi 2011; Labuschagne, Brent, & Claasen, 2005).



However, it is not evident that SD principles in projects are considered from the strategic perspective as a management process flowing from corporate sustainability strategy. This paper address this important research gap, in following central question—

What is the nature of the relationship between corporate sustainability strategy and the integration of sustainable development principles in projects?

Following a brief literature review, the paper presents an initial set of propositions as a theoretical framework for considering how SD principles are integrated in projects and emerge as project SD strategy from corporate sustainability strategy. These propositions address (1) where and how do firms define corporate sustainability strategy at the project level (project SD strategy)? If not, why not?; (2) What are the roles of the key players in determining whether and how it is done?; and (3) What variables influence the integration of sustainable development principles related to corporate sustainability strategy in projects? Finally, the paper provides a brief description of exploratory research which will employ the framework as a guide in examining four project cases.

3. Summary of Preliminary Review of the Literature

3.1 Corporate Sustainability Chameleon

The content and understanding of corporate sustainability varies according to the context (van Marrewyjk 2003). Corporate sustainability draws from the SD concept which is philosophical, value laden, and macro in nature, subject to broad definition (Robert et al. 2002; Ebner & Baumgartner 2010). Corporate sustainability requires adjustment of SD macro concepts to local content. Robert et al. (2002) operationalized the SD concept as a systems issue and a "process" of eliminating society's contribution to emissions which impact negatively on the environment and of contributing to human needs for present and future generations by "using all of our resources efficiently, fairly, and responsibly…" (p. 199). Sustainable development at the macro level involves global issues, i.e., climate change, pollution prevention/control; corporate conduct, enviromental standards, human rights and poverty reduction such as millenium development goals (Ebner & Baumgartner 2006). At the micro or local level, where corporations operate, SD involves (1) legal/institutional frameworks and agreements; (2) technological issues; (3) market issues, involving all players, i.e., customers, supply chain participants and competitors; (4) societal issues of stakeholders--employees, community, company shareholders, government and non-governmental organizations; (5) cultural issues within and without the corporation; and (6) environmental issues, i.e., resource availability and nature (Ebner & Baumgartner, p. 14). Given sustainable development's spatial characteristics (macro and micro; global, regional, national and local), temporal orientation (short, medium and long-term) and broad stakeholder foundation, it is not easily translated to the corporate setting (Robert et al. 2002; Ebner & Baumgartner 2006, 2010).

Corporate sustainability is generally viewed as SD at the firm level or micro level (Ebner & Baumgartner 2010) and involves stakeholder issues on all three sustainability aspects and corporate survival. Dyllick & Hockerts (2002) define corporate sustainability as "meeting the needs of a firm's direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities) without compromising its ability to meet the needs of future stakeholders as well" (p. 131). Dumphy et al., referenced in Clifton & Amran (2011) define corporate sustainability in phases, distinguishing corporate sustainability--a corporation that survives through excellent return for investors and the "sustaining corporation--concerned with "sustainable world goals" and how it contributes to them (p. 124)." These two concepts are integrally linked, as a business will cease to exist unless it is moving towards the sustaining corporation state. In this context, corporate sustainability can be seen as "responsible business behaviour" (Avram & Kuhne 2008), anchored in a stakeholder oriented approach. A business can "…develop a sustained competitive advantage by relating social and environmental issues to the value chain of the company (p. 465)."

As corporate sustainability varies due to its value-laden nature, it struggles for a commonly understood term. This variability influences how it looks and is understood within and outside organizations. Sustainable development, corporate sustainability, corporate social responsibility (CSR), corporate citizenship, and corporate responsibility often are used interchangeably and without a clear common definition or understanding of how the terms differ (Ebner & Baumgartner 2006). Ebner & Baumgartner found the following four usages in business research: (1) SD as the Brundtland definition—triple bottom line exclusively; (2) CSR as the social dimension of SD, emphasizing the stakeholder orientation; (3) SD seen as basis for CSR at the corporate level, with SD seen as societal issues; and (4) CSR and SD viewed as the same, emphasizing the ethical concept of the triple bottom line. It has been proposed that terms for corporate sustainability be standardized (Ebner & Baumgartner), while others maintain that standard definitions are not appropriate and that social context, culture, values and the development state of the organization will influence the definition of sustainability and how it is viewed within a company (Van Marrewijk 2003). The choice of terms appears important for understanding how SD issues are identified by business, understood by stakeholders, structured within strategy and mainstreamed in core business activities.

One explanation for the challenges of understanding and managing sustainable development at the corporate level is the difficulty in reconciling the content definitions. Gareis et al. (2010) have differentiated content-related definitions from process-related ones. They have distilled six process-related characteristics of sustainable development from Brundtland's definition: (1) holistic approach, (2) long-term oriented, (3) large spatial and institutional scale, (4) risk reducing, (5) values and ethical considerations, and (6) participation and capacity building. This process definition, viewed alongside the SD content definition, appears useful for understanding management issues related to integrating SD principles in core business operations.

3.2 Corporate Sustainability Strategy

Corporate sustainability (CS) strategy is a relatively recent concept, having roots in the important paradigm shift in strategic management literature in the 90s, embodied in Hart's "natural resource-based view" of the firm (Hart 1995). Hart viewed sustainable competitive advantage as rooted in three interconnected internal capabilities linked to managing "environmentally-oriented resources"—pollution prevention, product stewardship (incorporation of stakeholder perspective into the design and development of products, and (3) sustainable development (p. 991). Since Hart, research has grown in the area of CS strategy (Dyllick & Hockerts 2002; Ebner & Baumgartner 2010; van Marrewijk 2003; Birkin et al. 2009; Avram & Kuhne 2008; Fowler & Hope 2007).

Transparency, stakeholder dialogue and sustainability reporting are considered key aspects of CS strategy (Robert et al. 2002; Van Marrewijk 2003) along with four core principles (Robert et al.) as means for reaching overall system sustainability goals: (1) backcasting: approach to strategic planning with a vision of the successful future outcome that contributes to the desired economic, environmental and social conditions; (2) flexible platforms: creating "technically feasible stepping stones," for future investment that adds

value in the same direction; (3) good return on investment; and (4) precautionary principle: using caution when unsure of the environmental impact (p.202).

Corporate sustainability strategies can be differentiated, and this differentiation impacts whether and how SD principles are mainstreamed into core business activities, such as projects. Ebner & Baumgartner (2010) identify four CS strategy profiles: (1) introverted, the lowest level of sustainability maturity, motivated purely by reducing risk, focusing on compliance, conformity and professional standards; (2) extroverted or legitimization strategy which is a "license to operate", emphasizing stakeholder reporting, good will adherence to regulations and voluntary frameworks, and some leadership on CS issues; (3) conservative strategy which prioritizes internal cost efficiency and well defined processes, reflecting investment in technology,employee health and safety and ecological sustainability without prominance of societal issues; and (4) visionary strategy, revealing a developed internal organizational commitment to holistic sustainability and a corporate leadership role in the market place on these issues, either motivated solely by profitability or as an internalized view of sustainability as a strategic resource of the firm and integrated in all activities and processes. Of the four sustainability strategies, only visionary actually clearly connects sustainability to core business and mainstreams SD principles throughout all organization processes.

3.3 Projects and Strategy

A project does not function in isolation; it operates within the organizational structure, culture, strategy, and decision making processes of its parent organization and its stakeholder environment (Engwall 2003; Artto et al. 2008). Therefore the question of CS strategy considered in projects requires a review from two important vantage points in research: (1) how projects are viewed within organizations and (2) how projects are viewed in relation to strategy.

3.3.1 View of Projects

Traditionally viewed as instruments with short-term perspective, projects are now appreciated as social and value creation processes with long-term perspective, involving different meanings of value for different stakeholders (Winter, Smith, Morris & Cicmil 2006). As temporary organizations, projects have organizational characteristics as "open systems" that have distinct boundaries and operate in dynamic and complex internal and external environments involving stakeholder networks (Artto et al. 2008; Turner 2009). Thus, projects must compete for survival and strive for competitive advantage, not just for the parent organization but for the project itself as a temporary organization in order to maintain its competitive advantage within its environment (Gareis 2005; Artto et al.).

Projects also can be seen as in flux in the process of emerging or becoming and more complex than its lifecycle would suggest (Winter et al. 2006, p.643). The generally accepted lifecycle phases of concept/project definition, feasibility, design/appraisal, execution/control, and close out (Turner, 2009) can be viewed as conceptual, based on perspective and not an objective empirical reality (Linnehan & Kavanaugh 2004

referenced in Winter et al. 2006). Thus the reality of projects is constructed by its stakeholders and subject to interpretation.

3.3.2 Projects and Strategy

Two main perspectives exist concerning projects and strategy—projects as implementors of organizational strategy and projects as shapers of strategy. Mintzberg and Waters (1985) defined strategy as 'a pattern in a stream of decisions' (p.257). Importantly, strategy can be deliberate, as in planning, or emergent as in learning and adapting to the environment (Mintzberg et al. 1998).

Projects as implementors of strategy: A growing body of research and project management standards supports projects as a key instrument for implementing corporate and business strategy, for improving business performance and for obtaining competitive advantage. (PMI 2004; Gareis 2005; Morris & Jamieson 2005; Shenhar et al. 2007; JPMA n.d.; OGC/UK, 2005). Projects can be viewed as linked to strategy through a traditional process of strategic alignment—moving from organizational strategy to business strategy from which comprehensive project strategy is developed at the early project stage, i.e., project definition or initiation stage which is often called the project front end (Morris 2008, 2005; Morris & Jamieson 2005; Shenhar, et al. 2007; Mintzberg et al. 1998). Shenhar et al. define project strategy as "the definition of position, means, and guidelines of what to do and how to do it, to achieve the highest competitive advantage and the best value from the project (p.65)." The lack of adequate attention at the strategic front end of projects often accounts for project failure and the inability to create value (Morris P. 2008).

When viewed as a value creation process, projects must take on a more strategic approach at the front end in terms of definition of projects and programs (Winter, Andersen, Elvin, & Levene 2006). The project front-end begins "... when the initial idea is conceived, and proceeds to generate information, consolidate stakeholders' views and positions and arrive at the final decision as to whether or not to finance the project (Williams & Samset 2010, p.8). At this stage, the work of the project is linked to the business objectives of the sponsoring organization to ensure strategic alignment; the purpose, scope, and outputs of the project are defined (Turner 2009). The final choice of project concept should be guided by the anticipated effect of the project (Williams & Samset 2010). The project strategy, of what to do and how to do it, is formed to ensure best value and competitive advantage for the organization, and to determine success or failure criteria against the organization's strategic and business objectives (Shenhar et al. 2007, p.66).

Projects as shapers of strategy: Projects can emerge strategy through a process of negotiating, learning and adapting in its project environment (Morris 2008; Artto et al. 2008). Going beyond the strategic alignment concept, Artto et al. suggest the idea of a holistic project strategy concept where the project has the possibility to "operate as an autonomous organization, to seek survival and success in an uncertain and complex environment, and to consider strategic options possibly with multiple strong stakeholders (p.8)". When it has a high level of autonomy in its parent's organization, a project

establishes its own culture, objectives, and goals within the complex stakeholder network. In this context, projects can "…emerge and shape their strategy through the co-evolution of different stakeholders' interests and shape-- rather than being shaped by – their context (Artto et al., p.54)." The ability of a project to establish its own strategy makes projects "strategic" and not tactical (p.7). Within this framework, project strategy is defined as "a direction in a project that contributes to success of the project in its environment (p.8)." This perspective of emergent strategy is supported by Mintzberg & Walters (1985) who propose that strategy cannot be "centrally controlled" or "pre-planned" in environments characterized by diverse organizational actors, complexity and unpredictability. As shapers of strategy, projects present particular project and organizational challenges. Engwall (2003) states that when a project breaks with its organizational history, it will require project participants to define new roles and ways of coordinating project activities. Engwall observes that"… radically new projects might challenge the existing capabilities, knowledge bases and institutional structures of an organization" (2003, p. 802). This has implications for adaptive capabilities.

4. Corporate Sustainability Strategy and Projects-- Influences and Dimensions

This section presents insights on some influences or dimensions of the relationship between corporate sustainability and projects. These are (1) type of CS strategy; (2) knowledge and understanding of SD principles: (3) knowledge of CS business case and organizational sustainability culture; (4) adaptive capabilities; and (5) stakeholder management.

4.1 Type of corporate sustainability strategy

The type of CS strategy can determine whether sustainability principles are addressed holistically or singularly in projects (Ebner & Baumgartner 2010). Further, the CS strategy might not prioritize the mainstreaming SD principles in core business operations. The view of the project in the organization becomes pivotal, as it would influence how projects are able to engage stakeholders to determine appropriate strategy (Artto et al. 2008). Based on the project-strategy alignment literature, the project's strategy for addressing sustainability would be derived from the parent vision (Shenhar et al. 2007; Morris & Jamieson 2005). However, the project strategy for sustainability also could emerge from interaction by the project in its complex stakeholder environment so as to achieve benefits for a broader group of stakeholders, which could then inform and modify CS strategy (Artto et al. 2008; Mintzberg & Walters 1985).

4.2 Knowledge and Understanding of SD Principles

A lack of understanding of SD principles and CS strategy of a firm prevents successful implementation of sustainability strategy in firm activities (Linneluecke et al. 2009). Linnenluecke et al. found that understanding of SD and sustainability practices at top levels of the organization from where strategy is cascaded, is different from understanding of SD at the lower levels of the organization where different subcultures

operate and SD initiatives occur. They found that employee understanding of CS strategy is the best indicator of an holistic understanding of sustainable development.

4.3 Knowledge of Corporate Sustainability Business Case & Organizational Culture

When CS strategy is not well understood, employees do not prioritize sustainability issues as they do not link them to value creation and or enhanced competitiveness (Linnenluecke et al. 2009). Business managers and project managers are not necessarily prepared through business education for managing SD issues in the strategic formulation or execution process (Audebrand 2010). The business case for sustainability must be understood at the project level, where as a value creation process, projects are linked to corporate and business strategy (Turner 2009, Winter et al. 2006, Shenhar et al., 2007). The business case for sustainability is also linked with creating competitive advantage by going beyond the legal requirements (compliance) for sustainable business activities (Avram & Kuhne 2008). The understanding of the business case for CS is difficult due to the tension between the time horizon for business and sustainable development. Most businesses have short-term thinking, based on traditional ideas of economic efficiency where sustainable development requires a medium to long term process, based on working back from possible future situations (Birkin et al. 2009; Bagheri & Hjorth 2007; Robert et al. 2002). Research has shown that a culture of sustainability is related to making the business case and a condition for attaining holistic integration of sustainable development in corporate vision, strategy, core processes and activities, such as projects (Baumgartner 2009; Linneluecke et al. 2009). To make SD principles part of the values and assumptions of an organization, leaders, first, must link the business case for sustainable development to measured shareholder value and second, sustainable development must be a long-term strategy of the organization, demonstrating that it is valued by organizational leaders (Baumgartner 2009).

4.4 Adaptive Capabilities

Sustainability is a moving target and requires organizational adaptive capabilities to adjust to the evolving circumstances (Bagheri & Hjorth 2007). According to Hollings (Bagheri & Hjorth 2007), "sustainability is the capacity to create, test and maintain adaptive capability. Development is the process of creating, testing, and maintaining opportunity. The phrase that combines the two, sustainable development, therefore refers to the goal of fostering adaptive capabilities while simultaneously creating opportunities (p.84)."

4.4.1 Capability to Translate and Define Corporate Sustainability Objectives at the Project Level

Corporate sustainability issues draw from macro or global frameworks which require that the organization identify the issues it can address, based on local, national and even regional concerns. As sustainability is a systems problem, projects must take sustainability objectives at the corporate and business strategic levels, relate to and provide specificity; clarity and meaning at the project level (Bagheri & Hjorth). Project managers will need to be able to translate CS objectives to project level concerns which

are influenced by direct and indirect project beneficiaries in a complex stakeholder environment. It is at the project level that sustainability issues and strategies will emerge most clearly by way of asessments and interaction, negotiation, learning and collaboration with stakeholders in the project environment (Morris 2008; Lorbach et al. 2010).

4.4.2 Stakeholder Management Capability

Corporate sustainability strategy calls for a stakeholder-oriented approach (Dyllick & Hockerts 2002; Avram & Kuhne 2008; Birkin et al.) and organizational adaptive capability to work with and manage diverse groups of stakeholders (Bagheri & Hjorth 2007; Lorbach et al. 2010). As temporary organizations, projects are recognized as legitimately engaging in complex stakeholder relations (Artto et al. 2008), and agreement with stakeholders on what constitutes project success is considered a key condition of project success (Jugdev & Muller 2005). The stakeholder approach is important for translating macro SD concerns into micro ones and for developing appropriate strategy at the corporate and project level (Bagheri & Hjorth 2007; Birkin et al. 2009; Lorbach et al. 2010). However the stakeholder approach in corporations does not always lead to significant changes in how sustainability issues are addressed (Banerjee & Bonnefous 2011). Current strategy metaphors which permeate strategic management education still rest in warfare terminology while sustainable development implies cooperation, collaboration, adaptation and emergence with stakeholders (Audebrand (2010). In project management, the approach has been primarily "management of stakeholder", i.e. to use stakeholders as resources for projects or to subject stakeholders to project needs. This is in contrast to "management for stakeholder" approach which views stakeholders as having legitimate interests of their own (Eskerod & Huemann 2011). The numbers and diversity of stakeholder groups means that corporations will not be able to meet all stakeholder expectations. The capability to make acceptable trade-offs as part of stakeholder management is seen as essential (Dyllick & Hockerts 2002, p.134). Time constraint also influences the type and quality of stakeholder management (Birkin et. al, 2009). According to Eskerod and Huemann, both stakeholder management approaches are appropriate.

5. Theoretical Framework for Emerging Project SD Strategy

5.1 Research Paradigm

The paper now proposes a theoretical framework for emerging project SD strategy, following an interpretivist, social constructivist research paradigm. This is an appropriate approach to understanding the nature of the relationship between CS strategy and the integration of SD principles in projects, with the unit of analysis as the project. The concept of sustainability is not a static reality; it is a "moving target" (Bagheri & Hjorth 2007, p.84) which considers realities from different perspectives of stakeholders. The object of research, the emergence of project sustainability strategy from CS strategy, can be viewed as not an objective reality but as socially constructed realities that are subject to incessant change and the result of historical processes and the "structured nature of language" (Chia 2002, p.16). According to interpretivism, the observed event is seen "... from the participant's point of view with the aim of understanding how shared versions of

reality emerge and are maintained (Burrell & Morgan 1979, referenced in Johnson & Duberley 2000, p.80)."

5.2 Results--Theoretical Framework

This article proposes a theoretical framework, based on a set of propositions, to guide an exploratory study of the relationship between sustainable development at the corporate and project level and the process and issues related to how project SD strategy emerges.

General Proposition 1: Corporate sustainability strategy determines parameters for addressing SD issues in a project at the project definition and initiation stage (front end). However, a project, as a temporary organization, engaged in value creation and social processes, competes for survival and competitive advantage in its context. In the case of sustainable development, the project context involves a complex set of stakeholders with multiple perspectives and understandings of value. Thus project sustainability strategy begins to emerge at the project front end and is refined during the project planning and implementation stages depending on whether a project has autonomy to identify and address sustainability issues with stakeholders in the project environment.

Proposition 1a: The type of CS strategy indicates whether or not SD principles will be integrated in a project, establishing the parameters for considering sustainability principles (establishing project strategy) holistically—addressing all three economic, environmental and social principles or as single SD issues.

Based on strategic alignment theory, project strategy is traditionally viewed as flowing from organizational strategy and business strategy (Shenhar et al. 2007; Morris & Jamieson 2005; Mintzberg et al. 1998). Thus, a project's SD strategy would be derived from the strategic vision of the parent organization. That strategic vision would be encompassed in the CS strategy which identifies the economic, environmental and social issues that the corporation can address out of the universe of possible SD issues (Porter & Kramer 2006). The type of CS strategy is an indication whether an organization will view sustainable development as an externally driven issue (compliance or single focus driven) or internally driven, based on organizational commitment to integrating holistic SD principles in its activities and processes (Baumgartner 2010). The organization focus would be evident in the establishment of strategic parameters for the project.

Proposition 1b: SD principles are integrated in projects (project SD strategy) at the front end of the project cycle (project definition and initiation stage) where project strategy is defined.

The norm for establishing project strategy is at the project definition and initiation phase (Gareis 2005; Turner 2009; Morris 2008; Shenhar et al., 2007), i.e., project "front end. Project SD strategy likewise should be defined at this stage. At the front-end, initial sustainability concerns, established by the CD strategy and the anticipated SD impact of the project would be considered and stakeholder views would be identified and consolidated to arrive at the decision to finance the project and to form initial SD project strategy (Williams & Samset 2010, p.8). Strategic alignment with business objectives is

ensured at this stage (Turner 2009). The project strategy, of what to do and how to do it, is formed to ensure best value and competitive advantage for the organization, and to determine success or failure criteria against the CS strategy (Shenhar et al. 2007, p.66). However, because of the wider network of stakeholders beyond the project team, sponsors and investors, this strategy is only beginning to emerge and would need to be further defined.

Proposition 1c: The autonomy of projects in the organizational environment is necessary for projects to adapt CS strategy and to emerge and refine project SD strategy from its stakeholder environment.

As project SD strategy is initially formulated at the front-end phase from CS strategy, it does so at a stage where the availability of information in the project environment is at its lowest level (Williams & Samset, p.3). Interaction and understanding, at this stage, with the project's complex web of sustainability stakeholders is also limited. Viewing sustainability is a systems problem, understanding flows from larger to smaller systems (Bagheri & Hjorth 2007). Thus, SD strategy, as a flow from corporate level, gains greater specificity and clarity at the project level. However, as a system issue, sustainability is in flux. More information becomes available at the project planning stage and more so at the implementation stage as the project learns from its environment. Project autonomy enables a project to negotiate with its complex network of stakeholders and to emerge an appropriate project SD strategy to achieve success in its environment (Artto et al. 2008, p.8).

Proposition 1d: Key project personnel—project manager and project sponsor—understanding of CS strategy influences how business case for sustainability is translated to project level SD objectives.

When the project manager and project sponsor do not understand an organzation's CS strategy, SD principles usually are not understood and the business case for addressing sustainability in a project is absent (Linnenluecke et al., 2009). Thus, these key personnel do not consider sustainability issues as a priority concern for value creation or competitiveness (Turner 2009; Shenhar et al. 2007; Winter et al. 2006). This influences the integration of SD principles in the project

Proposition 1e: The project manager approach to project stakeholder management influences whether, what and how sustainability issues are identified and formulated into project SD strategy.

A stakeholder approach is necessary to identify project SD issues and to develop appropriate strategy (Bagheri & Hjorth 2007; Birkin et al. 2009; Lorbach et al. 2010; Artto et al. 2008). The choice of "management of stakeholders" or "management for stakeholders" approach influences the project SD strategy.

6. Future Research and Outlook

Based on a literature review and a social constructivist, interpretivist approach to research, this article has proposed a theoretical framework for understanding how project sustainable development strategy can emerge, starting with CS strategy. The framework will be employed in four exploratory case studies of projects in corporations in South Africa that have CS strategies. The objective is not to generalize the findings from these cases to a larger population of projects in corporations through statistical generalization. Instead the aim is to make a "level two inference" or "analytic or theoretical generalization"-- to generalize or compare the findings from the case studies to previously developed theory (Yin 2009, p.37, 38). The intended result is to add knowledge and new insight from actual corporate practice into how business can integrate SD principles into core business operations.

References

1. Artto, K, Dietrich, P & Martinsuo M 2008, What is project strategy?, *International Journal of Project Management*, vol. 26, pp. 4-12.
2. Artto, K, Martinsuo, M, Dietrich, P & Kujala, J 2008, 'Project strategy: strategy types and their contents in innovation project,' *International Journal of Managing Projects in Business*, vol. 1(1), pp. 49-65.
3. Avram, D & Kuhne, S. 2008, 'Implementing responsible business behaviour from a strategic management perspective: developing a framework for Austrian SMEs,' *Journal of Business Ethics*, DOI 10.1007/s10551-008-9897-7, vol. 82, pp. 463-475.
4. Bagheri, A & Hjorth, P 2007, Planning for sustainable development: a paradigm shift towards a process-based approach, *Sustainable Development*, vol. 15, pp. 83-96.
5. Baumgartner, R 2009, Organizational culture and leadership: preconditions for the development of a sustainable corporation, *Sustainable Development*, vol. 17, pp. 102-113.
6. Birkin, F, Polesi, T, & Lewis, L 2009, A new business model for sustainable development: an exploratory study using the theory of constraints in Nordic organizations, *Business Strategy and the Environment*, vol. 18, pp. 277-290.
7. Clifton, D & Amran, A 2011, 'The stakeholder approach: a sustainability perspective,' *Journal of Business Ethics*, vol. 98, pp. 121-136.
8. Dyllick, T & Hockerts, K 2002, 'Beyond the business case for corporate sustainability,' *Business Strategy and the Environment*, vol. 11, pp. 130-141.
9. Ebner, D & Baumgartner, RJ 2006, The relationship between sustainable development and corporate social responsibility, *Corporate Responsibility Research Conference 2006,* Dublin, *4-6 September*, http://www.crrconference.org.
10. Ebner, D & Baumgartner, R 2010, 'Corporate sustainability strategies: sustainability profiles and maturity levels,' *Sustainable Development*. Vol. 18, pp. 76-89.
11. Edum-Fotoe, E & Price, A 2008, ' A social ontology for appraising sustainability of construction projects and developments,' *International Journal of Project Management*, vol. 27, no. 4, pp. 313-322.
12. Engwall, M 2003, 'No project is an island,' *Research Policy*, vol. 32, pp. 789-808
13. Eskerod, P & Huemann, M 2011, Project Management Stakeholder practices—in the light of modern stakeholder theory and sustainability principles, *Nordic Academy of*

Management Meeting in Stockholm, August 22-24, 2011, Nordic Academy of Management.
14. Fowler, SJ & Hope, C 2007, 'Incorporating sustainable business practices into company strategy,' *Business Strategy and the Environment*, vol. 16, pp. 26-38.
15. Gareis, R, Huemann, M & Weninger, C 2010, The consideration of sustainability principles in the project assignment process: a analysis of project management approaches, *IPMA World Congress*, pp. 1-7, Istanbul, Turkey.
16. Gareis, R, Huemann, M & Martinuzzi, A 2011, 'What can project management learn from considering sustainability principles?,' *Project Perspectives,* ISSN 1445-4178.
17. Hart, SL 1995, 'A natural-resource-based view of the firm,' *Academy of Management Review*, vol. 20(4), pp. 986-1014.
18. Johnson, P & Harris, D 2000, *Understanding management research—an introduction to* epistemology, Sage, London.
19. Jugdev, K & Muller, R 2005, A retrospective look at our evolving understanding of project success, *Project Management Journal*, vol. 36, pp. 4-19.
20. Khalfan, M 2006, 'Managing sustainability within construction projects,' *Journal of Environmental Assessment Policy & Management*, vol. 8(1), pp. 41-60.
21. Labuschagne, C, Brent, A & Claasen, SJ 2005, *'Environmental and social impact considerations for sustainable project life cycle management in the process industry,' Corporate Social Responsibility and Environmental Management*, vol. 12, pp. 38-54.
22. Labuschagne, C & Brent, A 2004, 'Sustainable project life cycle management: aligning project management methodologies with the principles of sustainable development,' *PMSA International Conference*, Johannesburg, 10-12 May, Johannesburg.
23. Lacy, P,Cooper, T, Hayward, R & Neuberger, S 2010, *A New Era of* Sustainability, UN *Compact-Accenture CEO Study,* Accenture and UN Global Compact.
24. Linneluecke, M, Russell, S & Griffiths, A 2009, 'Subcultures and sustainability practices: the impact on understanding corporate sustainability,' *Business Strategy and the Environment*, vol. 18, pp. 432-452.
25. Lorbach, D, van Bakel, J, Whiteman, G & Rotmans, J 2010, 'Business strategies for transitions towards sustainable systems,' *Business Strategy and the Environment*, vol. 133, pp. 133-146.
26. Mintzberg, H & Walters, J 1985, 'Of strategies, deliberate and emergent,' *Strategic Management Journal*, vol. 6, pp. 257-272.
27. Mintzberg, H, Ahstrand, B & Lampel, J 1998, *Strategy safari*, Pearson Education Limited: Edinburgh.
28. Morris, P & Jamieson, A 2005, 'Moving from corporate strategy to project strategy,' *Project Management Journal*, vol. 36(4), pp. 5-18.
29. Morris, P 2008, 'Implementing strategy through project management: managing the front-end,' Unpublished manuscript.
30. Office of Government Commerce (OGC) UK 2005 *Managing Successful Projects with Prince* 2, TSO: London
31. Poli, M, 2007, 'The power of strategic focus,' in *Linking project management to business strategy*' in Shenhar, AJ, Milosev, D Dvir, & Thamhain, H 2007, *Linking Project Management to Business Strategy*, Newtown Square, Project Management Institute.

32. Porter, ME & Kramer, MR 2006, 'Strategy and society: the link between competitive advantage and corporate social responsibility,' *Harvard Business Review*, reprint, pp. 78-92.
33. Presley, A, Meade, L & Sarkis, J 2007, A strategic sustainability justification methodology for organizational decisions: a reverse logistics illustration, *International Journal of Production Research*, vol. 45, nos. 18-19, pp. 4595-4620.
34. Project Management Association of Japan (JPMA) nd, *A guidebook for project and project management for enterprise innovation P2M.* JPMA: Tokyo.
35. Project Management Institute 2004, *A guide to the project management body of knowledge,* 3rd edn, Project Management Institute: Newtown Square.
36. Robert, K-H, Schmidt-Bleek, B, de Larderel, de Larderel, A, Basile, G, Jansen, JL, Kuehr, R,Thomas, PP, Suzuki, M, Hawken, P & Wackernagel, M 2002, 'Strategic sustainable development—selection, design and synergies of applied tools,' *Journal of Cleaner Production*, vol. 10, pp. 197-214.
37. Shenhar, AJ, Milosev, D Dvir, & Thamhain, H 2007, *Linking Project Management to Business Strategy*, Newtown Square, Project Management Institute.
38. Turner, R 2009, *Handbook of Project Management*, 3rd edn, McGraw-Hill, New York.
39. Van Marrewijk, M 2003, 'Concepts and definitions of CSR and corporate sustainability: between agency and communion,' *Journal of Business Ethics*, vol. 44(2), pp. 95-105.
40. Williams, T & Samset, K 2010, 'Issues in front-end decision-making on projects,' *Project Management Journal*,' vol. 41(2), pp. 38-49.
41. Winter, M, Anderson, E, Elvin, R & Leven, R 2006, 'Focusing on business projects as an area for future research: an exploratory discussion of four different perspectives,' *International Journal of Project Management*, vol. 24, pp. 699-709.
42. Winter, M, Smith, C, Morris, P & Cicmil, S 2006, 'Directions for future research in project management: the main findings of a UK government-funded research network,' *International Journal of Project Management*, vol. 24, pp. 638-649.
43. Yin, R 2009, *Case study research: design and methods*, Thousand Oaks: Sage.
44. World Commission on Environment Development (WCED) 1987, *Our common future, Chapter 2: Towards sustainable* development. http://www.un-documents.net/ocf-02.htm.

About the Author

Ms. **Lynn A. Keeys** is an independent consultant and a Ph.D. candidate at the SKEMA Business School in Lille, France. An American based in Johannesburg, South Africa she is a certified project management professional with extensive experience in international cooperation and sustainable development, specializing in program and project strategy conceptualization, design and planning, project & strategy facilitation, and organizational project management. She can be contacted at lakeeys@gmail.com